MD 409 U 3

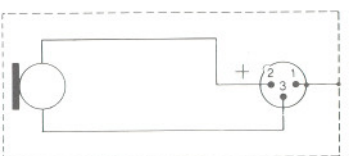
Dynamisches Mikrofon
Dynamic Microphone
Microphone dynamique

SENNHEISER

Abb. 1/Fig. 1

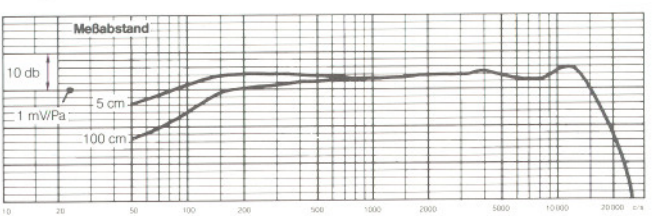
Abb. 2/Fig. 2

Beschaltung/Wiring/Câblage **MD 409 U 3**



3pol. XLR-3-Stecker
3-pin Cannon connector
Fiche tripolaire XLR-3

Frequenzkurve/Frequency response/Courbe de réponse



DYNAMISCHES MIKROFON MD 409 U 3

Lieferumfang: 1 Mikrofon
1 Schnellwechselklemme MZQ 100

Das MD 409 U 3 ist ein dynamisches Mikrofon mit Nierencharakteristik, das sich in besonderer Weise für die Abnahme von Schlag- und Blasinstrumenten eignet.

Eigenschaften

- Verzerrungsfreie Übertragung impulsstarker Instrumente und Instrumentenverstärker durch großflächige Membran
- Hohe Rückkopplungssicherheit durch ausgeprägte Richtwirkung
- Gute akustische Trennung der Einzelinstrumente, z. B. bei Schlagzeugabnahme
- Geringe Körperschallempfindlichkeit durch elastische Lagerung des Systems
- Robust durch stabilen Korb aus Edelstahl
- Geringer Platzbedarf durch flaches, quaderförmiges Design
- Echt vergoldete Einsprache
- Unzerbrechliche Schnellwechselklemme

Gebrauchshinweise

- Die Schnellwechselklemme ist mit einem Wechselgewinde ausgerüstet, das es ermöglicht, das Mikrofon auf Stativen mit 3/8", 1/2" und 5/8 x 27-G-Gewinde zu befestigen (Abb. 2).
- Die Einspracheseite ist mit »Front« gekennzeichnet (Abb. 1).

Anschlußhinweis

Professioneller Anschlußtechnik entsprechend ist das MD 409 U 3 mit einem 3poligen XLR-Stecker (Cannon) ausgestattet und niederohmig-symmetrisch beschaltet. Die minimale Abschlußimpedanz sollte 200 Ω nicht unterschreiten.

Geeignete Anschlußkabel

Anschlußkabel KA 7 U (Art.-Nr. 1777)
Mikrofonseitig mit XLR-Kupplung,
geräteseitig mit 3pol. XLR-Stecker. Länge: 7 m.

Anschlußkabel MZK 431 UK (Art.-Nr. 1606)
Geräteseitig mit 6,3 mm Klinkenstecker. Kabellänge: 5 m.

Anschlußkabel MZK 431 UK-1 (Art.-Nr. 2108)
Wie MZK 431 UK, jedoch 10 m lang.

Technische Daten

Akustische Arbeitsweise	Druckgradientenempfänger
Übertragungsbereich	50–15 000 Hz
Richtcharakteristik	cardioid
Feldleerlauf-Übertragungsfaktor bei 1000 Hz	1,18 mV/Pa ± 2,5 dB
Elektrische Impedanz bei 1000 Hz	200 Ω
Nennabschlußimpedanz	≧ 200 Ω
Stecker	3poliger XLR-Stecker
Steckerbeschaltung	2 und 3 = Tauchspule 1 und Steckergehäuse = Masse
Abmessungen in mm	55 x 34 x 134
Gewicht	ca. 180 g

Änderungen, vor allem zum technischen Fortschritt, vorbehalten.

DYNAMIC MICROPHONE MD 409 U 3

Extent of delivery: 1 microphone
1 quick release clamp MZQ 100

The MD 409 U 3 is a dynamic microphone, especially suited for use with percussions and brass wind instruments.

Features

- Undistorted transmission of powerful instruments and instrument amplifiers due to large surface membrane
- Extremely good feedback protection due to pronounced directional characteristic
- Good acoustical separation of the individual instruments, e. g. when recording percussions
- Insensitive to handling noise due to shock mounted system
- Sound inlet basket made from stainless steel, therefore very robust
- Needs only little space due to flat, rectangular design
- Genuine gold plated sound inlet
- Unbreakable quick release clamp

Tips for use

- The quick release clamp is fitted with a thread insert which enables the microphone to be mounted on tripods with 3/8", 1/2" and 5/8" x 27 G-threads (Fig. 2).
- The sound inlet is marked with the lettering "Front" (Fig. 1).

Tips for connection

The MD 409 U 3 is fitted with a 3-pin XLR-plug and has balanced, low-impedance wiring. The minimum load impedance shouldn't be less than 200 Ω.

Suitable connecting cables

Connecting cable KA 7 U (Art.-No 1777)
With 3-pin XLR-coupling at microphone side and 3-pin XLR-plug at unit side. Length: 7 m.

Connecting cable MZK 431 UK (Art.-No 1606)
With 6.3 mm jack at unit side. Length: 5 m.

Connecting cable MZK 431 UK-1 (Art.-No 2108)
Same as MZK 431 UK, but 10 m long.

Technical data

Acoustical mode of operation	pressure gradient receiver
Frequency response	50–15 000 Hz
Directional characteristic	cardioid
Open circuit output voltage at 1000 Hz	1.18 mV/Pa ± 2.5 dB
Electrical impedance at 1000 Hz	200 Ω
Min. load impedance	≧ 200 Ω
Connector	3-pin XLR-plug
Wiring	2 and 3 = moving coil 1 and housing = ground
Dimensions in mm	55 x 34 x 134
Weight	approx. 180 g

We reserve the right to alter specifications, in particular with regard to technical improvements.

MICROPHONE DYNAMIQUE MD 409 U 3

Livraison: 1 microphone
1 pince à fixation rapide MZQ 100

Le MD 409 U 3 est un microphone dynamique à caractéristique cardioïde, particulièrement bien adapté à la réception des sons produits par des instruments à vent et de percussion.

Propriétés

- Transmission sans distorsion des sons donnés par des instruments à fortes implusions ou à amplificateur grâce à une grande membrane.
- Haute résistance à la réaction acoustique dûe à un effet directionnel prononcé.
- Bonne séparation acoustique de chaque instrument, p. ex. s'il s'agit d'une batterie.
- Faible sensibilité aux bruits de maniement grâce à un logement élastique du système dans le boîtier.
- Corbeille en acier inoxidable robuste.
- Peu encombrant grâce à un design parallèlépipèdique plat.
- Pavillon acoustique doré.
- Pince à fixation rapide incassable.

Mode d'emploi

- La pince à fixation rapide est équipée d'un filetage alterné que permet de fixer le microphone sur des pieds ayant un filetage de $^3/_8$", $^1/_2$" ou $^5/_8$" x 27 G (Fig. 2).
- Le côté pavillon porte l'inscription «Front» (Fig. 1).

Branchement

Le MD 409 U 3 est équipé, selon la technique de connexion professionelle, d'une prise à 3 pôles XLR (Cannon) et branché symétriquement à faible résistance. L'impédance terminale ne devrait pas être inférieure à 200 Ω.

Câbles de branchement appropriés

Câble KA 7 U (No. d'art. 1777)
Connecteur XLR côté micro, prise XLR à 3 pôles côté appareil.
Longueur: 7 m.

Câble MZK 431 UK (No. d'art. 1606)
Jack de 6,3 mm côté appareil. Longueur: 5 m.

Câble MZK 431 UK-1 (No. d'art. 2108)
Comme MZK 431 UK mais d'une longueur de 10 m.

Caractéristiques techniques

Méthode acoustique	capteur à gradient de pression
Bande passante	50 à 15 000 Hz
Diréctivite	cardioïde
Facteur de transmission à vide pour 1000 Hz	1,18 mV/Pa ± 2,5 dB
Impédance pour 1000 Hz	200 Ω
Impédance terminale nominale	≧ 200 Ω
Prise	prise XLR à 3 pôles
Brochage	2 et 3 = bobine mobile 1 et boîtier = masse
Dimensions en mm	55 x 34 x 134
Poids	env. 180 g

Modifications, surtout dans l'intérêt du progrès technique, réservées.

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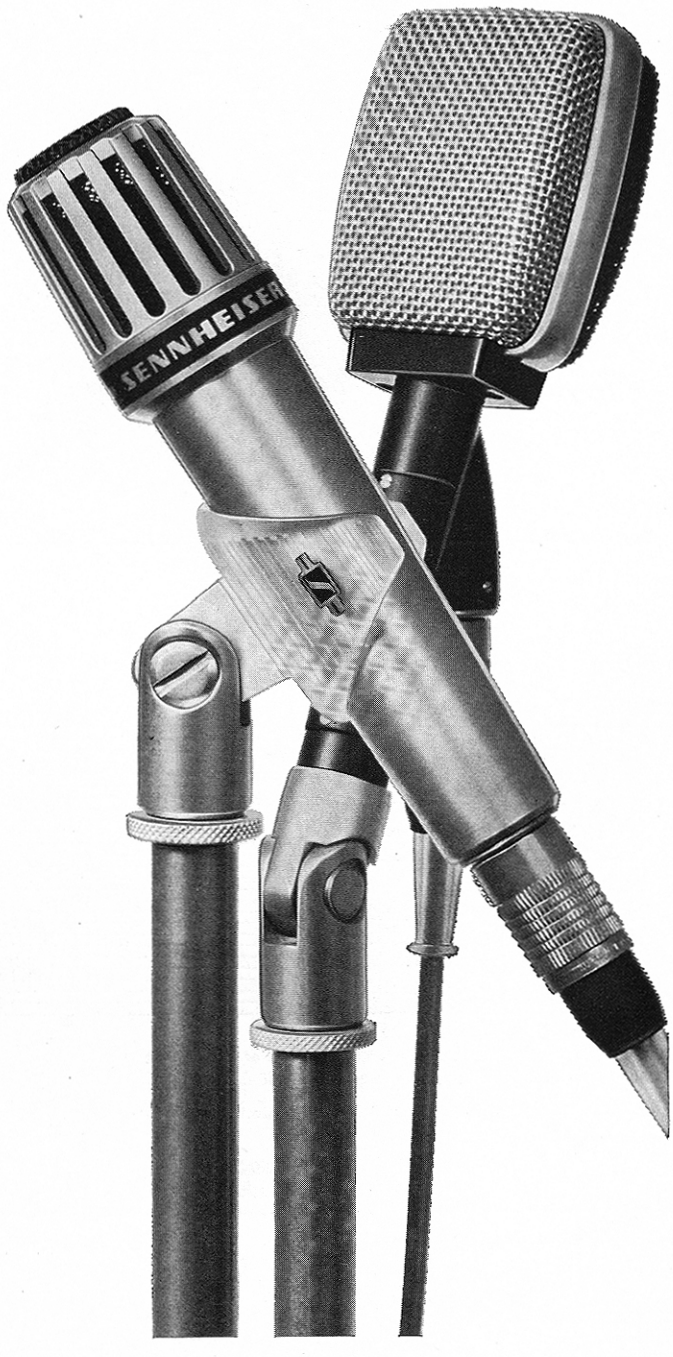
Microphones for Musicians

The studio dynamic cardioid microphone type MD 421 as described on pages 14 and 15 has been used successfully by professional musicians for many years, both for live stage work and recording purposes.

The popularity of this microphone increased in stage application with the advent of the black and gold version MD 421 de luxe. As an all purpose music microphone the MD 421 series is excellent, however, it became obvious, particularly with the increasing demand on the beat scene for a good vocalist microphone, that Sennheiser electronic should produce such a unit. This in mind design laboratory developed the MD 409 N and the MD 415 N.

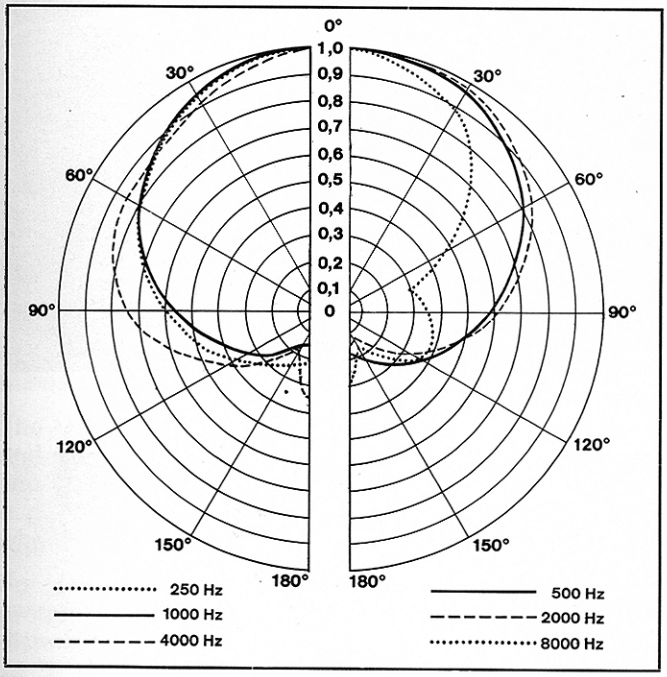
The MD 409 N dynamic microphone was designed for stand mounting to be used by instrumentalists who are unable to hold microphones, yet the properties of the microphone will allow the user to come within close proximity without distortion or exaggerating the bass response. The anti feedback properties built into the capsule allow the microphone to be used within a few feet of the loudspeaker without experiencing any "howl round". The MD 409 is fitted with a silent operating ON/OFF switch. The bass response in the MD 409 and MD 415 has been specially calibrated to avoid any bass overload when a vocalist is operating within a few inches of the diaphragm.

The MD 415 N has been especially designed for the vocalist. With all the acoustical features of the MD 409 N the MD 415 can be quickly released from a floor stand providing the MZA 415 microphone adaptor is used. An anti popping shield is built over the diaphragm for close work and the microphone case is turned in brass for ruggedness. Both the MD 415 and the MD 409 are finished in black and gold. The output of both microphones is balanced and wired to the N standard (page 12) and can be used with long cables.

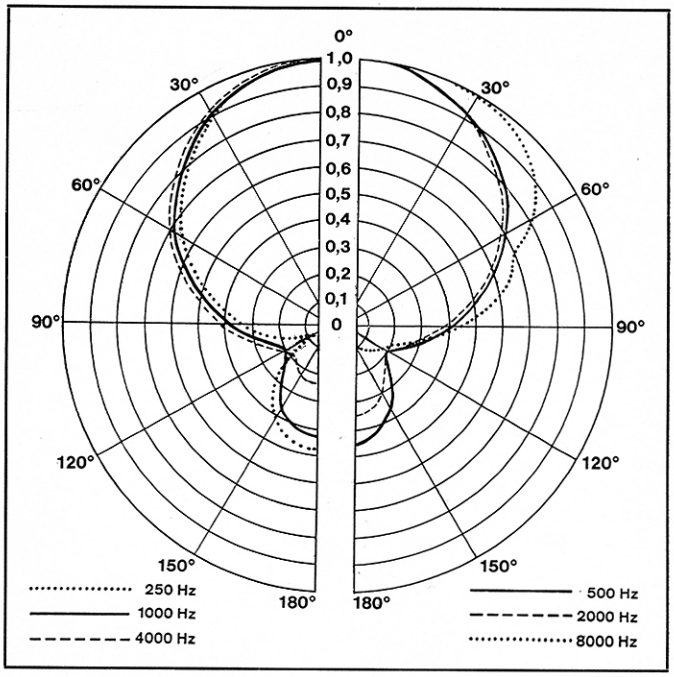


MD 415 N MD 409 N

Technical Data



Polar diagram MD 409 N



Polar diagram MD 415 N

	MD 409 N
Acoustical mode of operation	Pressure gradient transducer
Frequency range	50 – 15,000 Hz
Directional characteristic	Super-cardioid
Attenuation at 145 ° at 1,000 Hz	≧ 14 dB
Sensitivity at 1,000 Hz	0.18 mV/µbar
Impedance at 1,000 Hz	200 ohms
Output socket	T 3260
Cable connector	T 3261/1
Pin connections	1 + 3: signal 2 + case: ground
Dimensions	55 mm x 35 mm x 195 mm
Weight	12 oz.

	MD 415 N
Acoustical mode of operation	Pressure gradient transducer
Frequency range	60 – 15,000 Hz
Directional characteristic	Super-cardioid
Attenuation at 1,000 Hz	≧ 18 dB
Sensitivity at 1,000 Hz	0.12 mV/µbar ± 3 dB
Impedance at 1,000 Hz	300 ohms
Output socket	T 3260
Cable connector	T 3261/1
Pin connections	1 + 3: signal 2 + case: ground
Dimensions	35 mm ϕ, 140 mm length
Weight	11 oz.

We reserve the right to alter the specifications especially with regards to technical improvements.